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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/604,853 Filing Date: August 21, 2003 Appellant(s): ADDINGTON ET AL.

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GROUP 3700

Joel Rosenblatt
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/31/05 appealing from the Office action mailed 7/25/05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is aware of copending applications by applicants on bowling aids, 09/396530 and 09/396531, having a Board decision on 2/28/07 and a Brief filed 6/4/07 respectively.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The rejections under 101 and 112 as set forth in the final rejection have not been sustained in this Answer.

These grounds for rejection differs from the final rejection only to the extent that claim 13, previously rejected under 102, should have been rejected under 103 like similar copending claim 20.

As such, two issues are present to the Board as follows;

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Claims 1-4, 6-12, 14-16, 18, 19, 21-26, 28-30, 32 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Calentine.

Claims 5, 13, 17, 20, 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calentine.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US-4,062,540 12-1977 Calentine, Danny D.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

Claims 1-4, 6-12, 14-16, 18, 19, 21-30, 32 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Calentine.

1. A system of interlocking surfaces on bowler's finger pad cover 10 and on a bowling ball finger hole insert 14 for producing a force to counteract shifting of the ball relative to the bowler's finger pad (at 34 in fig. 8) and the contact area made between the finger pad cover and the finger hole insert, comprising, a. first means for mounting an interlocking three dimensional surface on a finger pad (element 28 shows protrusion means disclosed by appellants in figs. 3a. and 3c. as protruding element 39); b. second means for mounting an interlocking three dimensional surface on the finger hole of a bowling ball (element 72 shows an interlocking three dimensional surface means disclosed by appellants in figs. 3a. and 3c. as recessed element 20); c. said

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first and second means for co-acting (Considered the placement of the finger in the finger hole of the bowling ball in at the bottom of pg. 7 of appellant's specification. Such is shown in fig. 6 if Calentine.) to produce a counter force (These forces acting in the delivery of a bowling ball are inherent as can be seen from the article "The First Instrumented Bowling Ball" appended to this Answer) opposed to movement of said first means relative to said second means.

- 2. The system of claim 1, wherein,
- d. said first means includes means defining a primary axis and said second means includes means defining a matching primary axis (pad cover 10 is considered to have inherently a primary axis defined and insert 14 are considered to inherently have a matching primary axis) and said first and second means producing said counter force at an angle to said primary or said matching primary, axis (10 and 14 of Calentine inherently resist forces in all directions, including at an angle to the primary and matching axis).
- 3. The system of claim 2, wherein, said first and second means includes means to produce said counter force at an orthogonal angle to said primary or said matching primary axis. (10 and 14 of Calentine inherently resist forces in all directions, including at an angle to the primary and matching axis).
 - 4. The system of claim 1, wherein,
- e. said second means includes means for limiting the depth of insertion of said first means into said finger hole. (Appellant's means is a protrusion or lip 47 that limits the depth of insertion. Calentine shows such a lip in his element 50 shown to

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limit depth in fig. 6)

- 6. The system of claim 1, wherein,
- g. said first means includes means forming an elongated stud (28) and said second means includes means for forming a groove (70) for interlocking with said stud.
 - 7. The system of claim I, wherein,
- h. said first means includes means for forming at least one hemisphere protrusion (28) and said second means includes means for forming a hemisphere indentation (70 can be considered to be described as a "hemisphere indentation" as it is rounded in cross-section) for interlocking with said hemisphere protrusion (the contacting of 28 with 72 most broadly meets the function of interlocking).
- 8. A bowlers finger pad cover and bowling ball finger hole or finger hole insert with matching three dimensional surfaces for aligning the finger pad cover with the finger hole or finger hole insert, comprising, a. a finger pad cover (10) having a primary axis (inherently) and including a three dimensional surface (28) with an interlocking pattern; b. a finger hole or finger hole insert (14), having a matching primary axis (inherently), corresponding to said primary axis (shown in fig. 6), including a three dimensional surface (70 considered to be "matching") with a interlocking pattern matching said finger pad cover three dimensional surface.
- 9. The bowler's finger pad cover and bowling ball finger hole or finger hole insert, of claim 8, wherein, c. said interlocking patterns arranged substantially in the direction of said primary axis and said matching primary axis. (The protrusions 28 and groove 70 are considered to have a diameter and thickness that can be measured

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"substantially in a direction of said primary axis" meeting the limitations of the claim)

- 10. The bowler's finger pad cover and bowling ball finger hole or finger hole insert, of claim 9, wherein, d. said finger hole or finger hole insert, and said finger pad cover, are inelastic materials (The insert and cover are rigid materials col. 3, In. 16).
- 11.. The bowler's finger pad cover and bowling ball finger hole or finger hole insert, of claim 8, wherein said finger pad cover three dimensional surface is a stud (28) extending substantially in the direction of said primary axis and said finger hole or finger hole insert three dimensional surface is a groove (70).
- 12. The bowler's finger pad cover and bowling ball finger hole or finger hole insert, of claim 8, wherein said finger pad cover three dimensional surface is at least one hemisphere protrusion (28) and said finger hole or finger hole insert three dimensional surface is a hemisphere indentation (70 is considered to be described as a 'hemisphere indentation" in that they are compatible with the hemispherical studs 24, no further structure is recited in the claim to distinguish over this interpretation).
- 14. A system for controlling the alignment of a bowler's middle finger with a bowling ball, when lifting the ball at its release, comprising, a. first means (10) for interlocking a finger hole of a bowling ball with a bowler's finger; b. said first means including second means (14) for mounting in a finger hole of a bowling ball and third means (44) for mounting on the finger pad of a bowler's finger; and c. said first means

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for interlocking for holding said bowler's finger pad (at 34 in fig. 8) in alignment with said bowling ball (Shown in fig. 6).

- 15. The system of claim 14, wherein,
- d. said first means for interlocking includes means for defining a longitudinal axis

 (element 10 inherently has a longitudinal axis) and means for developing a counter

 (in the insertion of the sleeve in the finger hole as shown in fig. 6) force to a force

 (These forces in delivering of a bowling ball are inherent as discussed by the

 article "The First Instrumented Bowling Ball" appended to this Answer)

 intersecting with said longitudinal axis.
 - 16. The system of claim 15, wherein,
- e. said first means for interlocking includes means for separation of said second means and said third means (The releasing of the thumb from the hole as shown in fig. 6 is considered a means of separation as the thumb is pulled from the hole during the release of the ball).
- 18. The system of claim 14, wherein said first means includes a means for forming a groove (70) in said second means and means for forming a stud (28) in said third means.
- 19. The system of claim 14, wherein said first means includes a means forming a hemisphere indentation (70) in said second means and means forming a hemisphere protrusion (28) in said third means.
- 21. A method for interlocking sets of surfaces on a bowler's finger pad cover and on the surface of a bowling ball finger hole or finger hole insert for producing a force to

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counteract shifting of the ball relative to the bowler's finger pad (at 34 in fig. 8) and the contact area (shown in fig. 6) made between the finger pad cover and the finger hole or finger hole insert interior surface, comprising the steps of, a. arranging interlocking three dimensional surfaces on a finger pad cover (10) and on a bowling ball insert (14), to develop a force counter to shifting of the relative position of said finger pad cover (These forces in delivering of a bowling ball are inherent as discussed by the article "The First Instrumented Bowling Ball" appended to this Answer) and said bowling ball insert or the contact area made between the finger pad cover and the finger hole insert; b. placing said interlocking three dimensional surface on a finger pad in mating relationship with said interlocking three dimensional surface on the interior surface of a bowling ball finger hole or finger hole insert (shown in fig. 6).

c. using said interlocking sets of surfaces to develop a force counter (Col. 1, In. 54 of Calentine show frictional force developed between the cover 10 and hole insert 14) to a force for shifting the said contact area made between the finger pad cover and the finger hole insert or relative position of said finger pad cover and the finger hole

Claim 22. The method of claim 21, including the steps of,

insert. (Fig. 6 experiences the inherent forces that occur during the delivery of a bowling ball as discussed in the article "The First Instrumented Bowling Ball"

appended to this Answer)

Claim 23. The method of claim 21, including the step of, limiting the depth of insertion (met by element 50, col. 3, In. 43) of said finger pad cover into said finger hole insert.

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24. In a system for controlling the alignment of, a bowlers middle finger with a bowling ball,

when lifting the ball at its release, a first means (28) for interlocking a finger hole of a bowling ball with a bowler's finger and for aligning the bowler's finger with said bowling ball.

Claim 25. In a system of claim 24, wherein, said first means includes means for defining a longitudinal axis (Element 10 inherently has a longitudinal axis) and means for developing a counter force to a force (These forces in delivering of a bowling ball are inherent as discussed by the article "The First Instrumented Bowling Ball" appended to this Answer) intersecting with said longitudinal axis.

Claim 26. In a system of claim 24, wherein, said first means includes means for separation of said bowler's finger and said finger hole (A bowler in Calentine releasing his finger from the hole in delivering a bowling ball meets the limitations of this claim).

Claim 28. In a system of claim 24, including means for developing a cooperating force between said bowler's finger and said finger hole (These forces in delivering of a bowling ball are inherent as discussed by the article "The First Instrumented Bowling Ball" appended to this Answer), for countering a force directed against said alignment. (The forces of Calentine that improve a players grip on the ball are considered to "counter" all forces developed when delivering a ball).

Claim 29. A system of interacting surfaces for controlling the alignment of a

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bowler's finger with a bowling ball, comprising, a. first means for insertion into in a bowling ball finger hole (14); b. second means for mounting on a finger pad (10) and for forming a contact area with said first means when said second means is inserted in said first means (fig. 6); c. said first and second means including at least one means on at least one of said first or second means for producing a frictional force opposing the displacement of said first means or said second means (28 an 72), from said contact area.

Claim 30. The system of claim 29, including at least one means on at least one of said first or second means for deforming and in response to a force from the other of said first or second means (All materials can be considered to be "deformable" to a degree by the forces produced at the release of a bowling ball in the broadest interpretation. As such, Calentine inherently meets the limitation of this claim).

Claim 32. The system of claim 29, wherein said first or second means forms a two dimensional surface (28 and 72) for forming a frictional contact with the other of said first means or second means and including means for making said first or second means inelastic to the force of the bowling ball at its release. (All materials can be considered to be "inelastic" to a degree by the forces produced at the release of a bowling ball in the broadest interpretation. As such, Calentine inherently meets the limitation of this claim).

Claim 33. The system of claim 29, wherein said first or second means forms a two dimensional surface for forming a frictional contact with the other of said first means or second means and including means for making said first or second means elastic to

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. . .

the force of the bowling ball at its release. (All materials can be considered to be "elastic" to a degree by the forces produced at the release of a bowling ball in the broadest interpretation. As such, Calentine inherently meets the limitation of this claim).

Claim Rejections - 35 USC § 103

Claims 5, 13, 17, 20, 27, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calentine.

- 5. The system of claim 1, wherein,
- f. said first means includes means for covering the finger tip and for providing a substantially inelastic contact area between said finger tip and said finger hole.
 - 17. The system of claim 14, including,
- f. means for protecting the tip of said bowler's finger from the force of the bowling ball at its release and for transferring substantially all of the accelerating force for said bowler's finger tip to said bowling ball.

Claim 27. In a system of claim 24, including means for protecting the tip of said bowler's finger from the force of the bowling ball at its release and for transferring substantially all of the accelerating force for said bowler's finger tip to said bowling ball. (As to claims 5, 17 and 27, while Calentine fails to show covering of the finger tip, finger tip gloves and gloves without finger tip are well known depending upon the users desired amounts of protection. In bowing, full finger inserts are known as shown by Pugh. To have included a means for covering the finger tip of Calentine would have been obvious in order to afford protection to the fingertip during bowling. Further one must consider such is a matter of common

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knowledge and common sense of the person of ordinary skill in the art to design a covering on the tip of the finger where more protection is needed. (See In re Bozek, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)). Moreover, skill is presumed on the part of those practicing in the art. See In re Sovish, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985). Additionally, one must observe that an artisan must be presumed to know something about the art apart from what the references disclose (see In re Jacoby, 309 F.2d, 513, 516, 135 USPQ 317, 319 (CCPA 1962). This rational has been recently summed up in KSR Int'l Co. v. Teleflex, Inc., No 04-1350 (U.S. APR. 30, 2007)).

- 13. The bowler's finger pad cover and bowling ball finger hole or finger hole insert, of claim 8, wherein said finger pad cover three dimensional surface is a plurality of stude (24 and 28) disposed on opposed sides of said primary axis and said finger hole or finger hole insert three dimensional surface is a plurality of grooves.
- 20. The system of claim 14 wherein said first means includes a means forming a plurality of grooves in said second means and means for forming a plurality of studes in said third means.

(As to claims 13 and 20, duplication of elements has been held obvious. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). To have provided more than one grove would have been obvious in order to increase the friction and control between the sleeve 10 and insert 14 of Calentine.)

Claim 31. The system of claim 30 wherein, said wherein said first or second means is means forming an adhesive layer. (Stickum™ is a trademark adhesive of

Mueller Sports Medicine used to improve grip on sporting goods, this product is well known. When sprayed on the fingers or device such as that of Calentine would have been obvious to increase friction in gripping the ball.)

(10) Response to Argument

1. Claims rejected under 35 USC 101.

Not sustained and no further comment is deemed necessary.

2. Claims rejected und 35 USC 112, second.

Not sustained.

3. Claims under 35 USC 102

Applicants Appellant's arguments on pgs. 20-25 amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Instead, applicant reprints copies of the claims with underlined portions and states that such is not shown. Additionally, appellant states that "examiner has not shown... the recited elements". Examiner's position with respect to each limitation in the claims is explicitly set forth above in the Grounds for Rejection. Since Appellants arguments contain no remarks as to his claims and the limitations therein evade the applied art, no further comment is deemed necessary. Examiner, position is set forth above as to have the art shows and fairly teach the claimed invention.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/William Pierce/ Primary Examiner 3711

Conferees:

/Gene Kim/ SPE 3711

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